

Meeting the Challenge of Change

Apríl 21-24, 2002 South Sioux City Marina Inn Nebraska

Announcement

Missouri River at Niobrara, Nebraska

Mailing Label



COLUMBIA, MO PERMIT NO. 31 PRSRT STD U.S. POSTAGE

Columbia Environmental Research Center

U.S. Geological Survey

4200 New Haven Road

Columbia, MO 65201

Return Service Requested

Missouri River Science



he Missouri River Natural Resources Conference is the only annual basinwide conference available to all basin residents. It provides a broad perspective on Missouri River issues and serves as a forum for researchers, resource managers, citizens, and policymakers. The conference is an opportunity for people to learn about the river's environmental condition and share points of view on river management.



Conference Schedule Sunday, April 21 Niobrara Field Trip (meet in Marina Inn lobby at 8:30 a.m.)

9:00 a.m. - 5:00 p.m. Noon - 7:00 p.m. Registration

Poster and exhibit set-up

5:00 - 7:00 p.m. Social - Marina Inn Terrace overlooking the Missouri River 6:00 p.m. Musical performance by Dave Para and Cathy Barton

Monday, April 22

7:00 a.m. - 5:00 p.m. Registration

7:00 a.m. - 7:00 p.m. Posters and exhibits display (through Wednesday)

8:00 a.m.- 10:10 a.m. Presentations: Plenary

Presentations: Habitat Rehabilitation 10:40 a.m. - Noon

Noon - 1:30 p.m. Lunch - Marina Inn

1:30 - 5:00 p.m. Concurrent Presentations:

(1) Endangered Species

(2) Hydrology • Geomorphology • Water Quality

5:00 - 7:00 p.m. Social with poster and exhibit session

Banquet - Marina Inn 7:00 - 9:00 p.m.

Presentation by Congressman Douglas Bereuter

Tuesday, April 23

8:00 a.m. - 5:00 p.m. Field Trips:

(1) Missouri National Recreational River, Gavins Point Dam, and National Fish Hatchery

(2) Lewis and Clark sites, river rehabilitation sites

5:00 p.m. - 7:00 p.m. Social and tour - Ponca State Park

Concurrent presentations:

(1) Biological Resource Trends • Habitat Relationships

(2) Geographic Information System (GIS) • Land Use • Recreational Use

Sunday, April 21

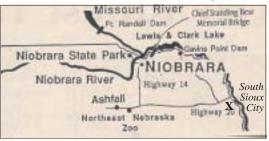
Niobrara Fleld Trip \$25 extra (includes lunch) requires registration (page 17)

Lunch is at the Two Rivers Steakhouse in Niobrara.

Niobrara, Nebraska is located at the confluence of the Missouri and Niobrara Rivers at the western end of Lewis and Clark Lake. The Niobrara River contributes vast amounts of sediment to the headwaters of the lake.

On the tour, presentations will be made by the Nebraska Game and Parks Commission, the U.S. Army Corps of Engineers, the National Park Service, and the Lewis and Clark South Dakota-Nebraska Preservation Association to explain the sediment issue and share information about the long-term effects to the lake and the local communities.

A visit to the beautiful Niobrara State Park provides a spectacular view of the confluence. An original Lewis and Clark site is visible from the park's Kramer Interpretive Center. 9:00 a.m. - 5:00 p.m.





A delta has formed at the headwaters of Lewis and Clark Lake from Niobrara River sediment.



The railroad bridge at the mouth of the Niobrara River used to be 20 feet above the river before sediment buildup; now it is used as a walking bridge.



Chief Standing Bear Memorial Bridge was completed in 1998 connecting Niobrara to Running Water, South Dakota. It is named for the Ponca Tribe chieftan who successfully fought for Indian civil rights in an 1879 federal lawsuit.

All photos this page by USGS

Registration begins - Marina Inn

Poster and exhibit set-up

5:00 pm - 7:00 pm

Noon - 7:00 pm

Welcoming Social

Marina Inn Terrace overlooking the Missouri River



Enjoy meeting old and new friends while viewing the Mighty MO and listening to old time river songs. Appetizers and cash bar available.

Musical Performance

Dave Para and Cathy Barton



For 25 years, Dave Para and Cathy Barton have created dynamic performances acclaimed for variety and expertise in vocal and instrumental music. Interpreters of traditional music, the duo scours the backroads to learn from a wide variety of grassroots artists. For much of their career, Cathy and Dave have been fascinated with the folklore, legends, and music of the Missouri and Mississippi Rivers.

Many of their selections for the social will be from their newest CD, *Living on the River*, an album dedicated to the rivers of America. The couple lives in Boonville, a Missouri River town in mid-Missouri. They play the hammered and fretted dulcimers, banjo, guitar and autoharp, as we'l as "found" instruments like bones, spoons, mouthbow and leaf.



Thomas Hart Benton painting from Para and Barton's *Living* on the River CD cover. (Life on the Mississippi, Mark Twain, Limited Editions club, 1944).

WEB PAGE www.bartonpara.com

2

Monday, April 22

Registration **Posters and Exhibits Displayed Morning Sessions** Lunch - Marina Inn

7:00 a.m. - 5:00 p.m. 7:00 a.m. - 7:00 p.m. 8:00 am - Noon Noon - 1:30 p.m.

Presentations: *Plenary*

Welcome.

Gene Zuerlein, Conference Chairman, Nebraska Game and Parks Commission, Lincoln, NE

Managing River Flows for Ecological Integrity. Brian Richter, Director, The Nature Conservancy Freshwater Initiative, Charlottesville VA, will describe advances in ecologically sustainable water management through adaptive management. He will highlight tools and methods that are being applied to key scientific challenges. http://www.freshwater.org/

Adaptive Management:

Working the Water Management Conundrum Steve Light, Institute for Agriculture and Trade Policy, Minneapolis MN. Dr. Light is a member of the National Research Council's committee on Missouri River

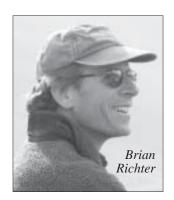
Ecosystem Science that just published the report, The Missouri River Ecosystem: Exploring the Propsects for Recovery. http://www.iatp.org/

How Should We Proceed to Manage River Flows for Biodiversity?

David Galat, Associate Professor of River Ecology, **USGS** Cooperative Research Unit, University of Missouri, Columbia MO.

Managing river flows for biodiversity is an emerging discipline within restoration ecology. Dr. Galat reviews six steps to help accomplish flow restoration projects.







Presentations: Habitat Rehabilitation

The Distribution of Conservation Lands on the Missouri River Valley Bottom, Sioux City, Iowa to St. Louis, Missouri. Mark S. Laustrup, U.S. Geological Survey, Columbia MO

Mitigation Project Performance, Missouri River in Iowa and Nebraska.

John Remus, II, P.E., U.S. Army Corps of Engineers, Omaha NE

Iowa's Approach to Missouri River Mitigation Project Development. Ed Weiner, Iowa Department of Natural Resources, Onawa IA

Comparative Habitat Evaluations in Side-channel Chute Rehabilitation Projects, Lower Missouri River. Robert Jacobson, U.S. Geological Survey, Columbia MO

Exhibitors

American Rivers Environmental Systems Research Institute, Inc. (ESRI) Hydrolab Marine Sonic Technology Missouri River Institute, South Dakota Missouri Sedimentation Action Coalition National Park Service Nebraska Game and Parks Commission Papio-Missouri Natural Resources District Sierra Club, Living Rivers Group South Dakota State University U.S. Army Corps of Engineers U.S. Environmental Protection Agency U.S. Fish and Wildlife Service U.S. Geological Survey University of Missouri, Outreach and Extension University of Nebraska University of South Dakota

Winnebago Tribe

Monday, April 22

Concurrent Sessions 1:30 pm - 5:00 p.m

Session 1

Endangered Species

Pallid Sturgeon: What We've Learned in the Last Decade. Steve Krentz. U.S. Fish and Wildlife Service, Bismarck ND

The Corps of Engineers and the Biological Opinion: New Opportunities for Pallid Sturgeon Recovery. Mark Drobish, U.S. Army Corps of Engineers, Yankton SD

Pallid and Shovelnose Sturgeon in the Lower Missouri and Middle Mississippi Rivers.

Joanne Grady, U.S. Fish and Wildlife Service, Columbia MO

Pallid Sturgeon Propagation at the Gavins Point National Fish Hatchery.

Herb Bollig, U.S. Fish and Wildlife Service, Yankton SD

Home Work, Fisherman Trains and B.F. Shaw. Capt. William (Bill) Beacom, Sioux City IA

Habitat Use and Movement of Juvenile Pallid Sturgeon in the Missouri River.

Wayne Stancill, U.S. Fish and Wildlife Service, Pierre SD

Least Tern and Piping Plover Response to the 1997 Flood Event on the Missouri River.

Gregory Pavelka, U.S. Army Corps of Engineers, Yankton SD

Emergent Sandbar Habitat Trends below Gavins Point Dam. Bruce A. Vander Lee, U.S. Army Corps of Engineers, Yankton SD

Least Tern and Piping Plover Captive Rearing Program: A Review and Update.

Rosemary Vander Lee, U.S. Army Corps of Engineers, Yankton SD

Poster and Exhibit Session 5:00 p.m. - 7:00 p.m.

Appetizers with cash bar and time to talk to presenters

1 DAY

A R H Session 2

Hydrology • Geomorphology • Water Quality

Effects of Woody Corridors on Levee Damage in Flood of 1993. Stephen Allen, University of Missouri, Columbia MO

Long-Term Stage Trends on the Lower Missouri River Based on an Empirical Hydrologic Analysis.

Reuben Heine, Southern Illinois University, Carbondale IL

Determination of the Natural Flow Regime of the Missouri River Below Gavins Point Dam.

Roger Kay, U.S. Army Corps of Engineers, Omaha NE

Use of Stream-Gage Information to Assess Changes in River-Channel Morphology.

Kyle E. Juracek, U.S. Geological Survey, Lawrence KS

Hydrological Effects of a Constructed Chute on Wetland Stage and Ground-water Levels in the Missouri River.

Brian P. Kelly, U.S. Geological Survey, Independence MO

A Whole-lake Water Quality Survey of Lake Oahe based on a Spatially-balanced Probabilistic Design.

David W. Bolgrien, U.S. Environmental Protection Agency, Duluth MN

Bad River Phase II Water Quality Project — A Success Story.Jerry Thelen, Stanley County Conservation District, Fort Pierre SD

Reservoir Sedimentation - A Time for Action.

Howard Paul, Missouri Sedimentation Action Coalition, Wagner SD

Interstate Water Quality - TMDL Concerns.

Sharon Clifford, Missouri Department of Natural Resources,

Jefferson City MO



7:00 p.m.

Presentation by Congressman Bereuter

Congressman Douglas Bereuter, an advocate for the Missouri River, introduced H.R. 3570 to Congress on Dec. 20, 2001. The bill proposes to monitor the health of the Missouri River and measure biological, chemical, and physical responses to changes in river management and other significant variables. http://thomas.loc.gov/cgi-bin/bdquery/z?d107:h.r.03570:

Tuesday, April 23

Field Trips 8:00 a.m. - 5:00 p.m.

Field Trip #1

(1) Missouri National Recreational River

A boat trip on the Missouri National Recreational River will show the few remaining semi-natural, dynamic reaches of the river. Though not numerous, pallid sturgeon are still reported by anglers in the reach where there are sandbars, multiple channels, islands, eroding banklines and snags. Still, most of the backwaters and side channels have been degraded by the loss of sediment trapped in the upstream reservoirs since Gavins Point Dam closed in 1957. High water in the late 90's created higher elevation sandbars providing nesting habitat for least terns and piping plovers.

(2) U.S. Army Corps of Engineers Lewis & Clark Visitor's Center

Gavin's Point Dam at Yankton, SD, is the most southern of the dams on the Missouri River main stem. It is here that the quantity of water released to the lower river is controlled. The dam marks the upstream end of the 59-mile Missouri National Recreational River.

(3) Gavins Point National Fish Hatchery

This Federal hatchery, one of 65 in the country, produces 12-16 species of fish including the endangered pallid sturgeon and the paddlefish, another species of concern.

At 5:00 p.m., the two guided field trips will rendezvous at Ponca State Park for a social and tour of the park. Field Trip #1 is limited to 150 people and will be filled through PRE-REGISTRATION on a first come-first serve basis (see page 17). After the first 150, participants will go on Trip #2.





Ponca

(10)



Ponca State Park social hosted by the Better Ponca Foundation

Visitor's Center

(10) Ponca State Park Tour and Social 5:00 - 7:00 p.m.

Ponca State Park overlooks the boundary between the channelized and unchannelized river north of Sioux City. Tour the site of the new Missouri National Recreational River Resource and Education Center just north of Ponca.

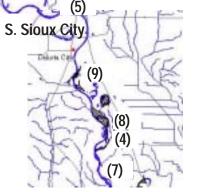
Field Trip #2

(4-6) Lewis and Clark Sites

See L&C State Park at Onawa, IA where there is a restored L&C keelboat; enjoy a visit to the Park's giftshop and bookstore (4); the Sergeant Floyd Monument in Sioux City (5); and Spirit Mound north of Vermillion, SD (6).

(7-9) River Rehabilitation Sites

Tour local Missouri River habitat rehabilitation sites at Louisville Bend (7), Tieville/Decatur/Blackbird Bend (8) and Snyder Bend/Winnebago Bend (9). Developed by the U.S. Army Corps of Engineers and the lowa Department of Natural Resources, these sites present an interesting contrast to sites further downstream because of constraints posed by bed degradation in the channel of the river north of Omaha.



Wednesday, April 24

Concurrent Sessions 8:00 a.m. - Noon

Session 1

Biological Resource Trends • **Habitat Relationships**

Fishes and Habitat of the National Recreational River Segments of the Missouri River in South Dakota.

Charles Berry, Jr, USGS Cooperative Research Unit and South Dakota State University, Brookings SD

Fish Population Dynamics at Hamburg Bend.

Steve Freeling, Nebraska Game and Parks Commission, Lincoln NE

Fish Community Monitoring at Lisbon Bottom, a Restoration Area on the Lower Missouri River.

Louise Mauldin, U.S. Fish and Wildlife Service, Columbia MO

Growth of Benthic Fishes in the Missouri and Lower Yellowstone Rivers.

Clay Pierce, U.S. Geological Survey, Ames IA

Sources of Spatial Variation in Shoreline-associated Large Woody Debris in the Garrison Reach of the Upper Missouri River.

Ted Angradi, U.S. EPA Office of Research and Development, Denver CO

Landscape Structure and Composition in the Garrison Reach of the Upper Missouri River.

E. William Schweiger, U.S. EPA Office of Research and Development, Denver CO

Managing Missouri River Floodplain Habitats in an Altered Landscape.

Dale Humburg, Missouri Department of Conservation, Columbia MO

A Multi-disciplinary Study of Floodplain Wetland Ecology at Lisbon Bottom, Missouri.

Duane Chapman, U.S. Geological Survey, Columbia MO

Purple Loosestrife - Can We Control It?

Stevan Knezevic, University of Nebraska, Concord NE

Session 2

Geographic Information Systems (GIS) • Land Use • **Recreational Use**

Temporal Changes in Land Use Practices in the Missouri River Watershed, South Dakota.

Ken Higgins, USGS Cooperative Research Unit and South Dakota State University, Brookings SD

Development of a Decision Support System for the Missouri River - Lessons Learned from the Upper Mississippi River.

Carl Korschgen, U.S. Geological Survey, Columbia MO

Depth Analysis on the Missouri River.

Kevin C. Borisenko, Missouri Department of Conservation, Jefferson City MO

Using Digital Data Collection and the Internet -A Solution for Data Management.

Bruce A. Vander Lee, U.S. Army Corps of Engineers, Yankton SD

An Examination of the Physical Environment of the Lower Missouri River.

Bill Little, Missouri Department of Natural Resources, Rolla MO

Influence of Katy Trail State Park and Lewis and Clark Activities on Missouri River.

Douglas Eiken, Missouri Department of Natural Resources, Jefferson City MO

Angling Recreational Use Patterns and Economics on the Missouri River System in South Dakota.

Clifton Stone, South Dakota Game, Fish & Parks, Chamberlain SD

Missouri River Creel Survey.

Kirk Steffenson, Nebraska Game and Parks Commission, Lincoln I

Nebraska and South Dakota 2000 Missouri River Recreational Use Survey.

David Tsoodle, Nebraska Game and Parks Commission, Lincoln NE

Posters

A Biotic Survey of a Backwater and Bottomland Along the Missouri National Recreational River in Ponca State Park, Nebraska.

Bryan R.Gasper, University of South Dakota, Vermillion SD

A Proposed Framework for Development and Validation of an Aquatic Macroinvertebrate Bioassessment Program for the Lower Missouri River.

Barry Poulton, U.S. Geological Survey, Columbia MO

Abundance and Biodiversity of Aerial and Terrestrial Invertebrates in the Benedictine Bottoms.

Summer Jackson, Benedictine College, Atchison KS

Aquatic and Wildlife Habitat Restoration on the Missouri River. Richard Gorton, HDR Engineering Inc, Omaha NE

Bird Biodiversity on the Missouri River Benedictine Bottoms Wildlife Mitigation Site from 1994-2001.

Jill Hellmer, Benedictine College, Atchison KS

Comparisons of Shovelnose Sturgeon and Pallid Sturgeon in the Lower Platte River, Nebraska.

Benjamin D. Swigle, University of Nebraska-Lincoln, School of Natural Resource Science, Lincoln NE

Cyprinid and Catostomid Drift in the Lower Platte River, Nebraska.

Cory N. Reade, University of Nebraska - Lincoln, School of Natural Resource Science, Lincoln NE

Deer Population Structure on the Benedictine Bottoms Missouri River Mitigation Site (1994-2002).

Kyle Kellner, Benedictine College, Atchison KS

Floristic Studies of Natural Plant Recolonization on the Benedictine Bottoms Wildlife Mitigation Site.

James Bethany, Benedictine College, Atchison KS

GIS Base Data Resources for the Missouri River in South Dakota

Tim Cowman, South Dakota Geological Survey, Vermillion SD

Impacts of Landscape Change on Environmental Quality in Headwater Areas.

Tony Prato, University of Missouri-Columbia, Columbia MO

Lewis and Clark's Lower Missouri River Plants on the Benedictine Bottoms Wildlife Mitigation Site.

Catherine Wiegand, Benedictine College, Atchison KS

Missouri National Recreational River: (Almost) 25-years of Corps Involvement.

Becky Latka, U.S. Army Corps Engineers, Omaha NE

Missouri River Basin Consortium.

Tony Prato, University of Missouri-Columbia, Columbia MO

Population Abundance and Diversity of Small Mammals on the Benedictine Bottoms from 1995-2002.

Jesse Lindquist, Benedictine College, Atchison KS

Qualitative Analysis of the Survivorship of Burned Versus Non-burned Corps Planted Trees Found on the Benedictine Bottoms Wildlife Mitigation Site.

Erin Urban, Benedictine College, Atchison KS

Reducing Sedimentation to the Missouri River in South Dakota through Conservation Practices.

Joby Timm, Natural Resources Conservation Service, Pierre SD

Reducing the Field Handling Time of Sturgeon.

Kirk Steffenson, Nebraska Game and Parks Commission, Lincoln NE

Reptile and Amphibian Abundance on the Benedictine Bottoms Wildlife Mitigation Site.

Michael Nations, Benedictine College, Atchison KS

Soil Microbial Biodiversity and Abundance on the Benedictine Bottoms Wildlife Mitigation Site.

Jackqueline M. Bacon, Benedictine College, Atchison KS

Use of Shallow-water Habitat by Larval Fishes in the Lower Missouri River.

Kerry Reeves, University of Missouri, Department of Fish and Wildlife, Columbia MO

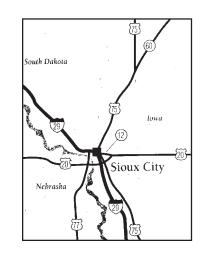
Interior Least Tern
Nebraska Game and Parks Commissi

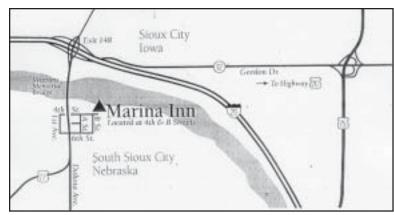
Conference Hotel

Marina Inn

4th and B Streets South Sioux City, Nebraska 68776 1-800-798-7980 or 402-494-4000 fax 402-494-2550 www.marina-inn.com

- Rooms are \$65 single or double.
- Deadline for hotel registration is March 31.
- Tell hotel that you're with the "Missouri River Natural Resources Conference."





The Marina Inn is located on the Missouri River waterfront. Take exit 148 off I-29 over Veteran's Memorial Bridge. Turn left on 6th Street, go 2 blocks east to B Street, make another turn left and go 2 blocks north to 4th and B Streets.

Overflow hotel

Sioux City Hilton

707 4th Street Sioux City, IA 51101 800-593-0555 Sales Fax: 712-294-5261 For local information: South Sioux City Visitor's Bureau 1-800-798-6327

http://www.sscdc.net/ssctour/

Nebraska Game and Parks Commission http://www.nqpc.state.ne.us/

State of Nebraska

http://www.state.ne.us/visiting.html

Sponsors & Organizers

Gene Zuerlein, Chairman

Nebraska Game and Parks Commission 402-471-1542 zuerlein@nqpc.state.ne.us

Yolanda Alanis

Winnebago Tribe of Nebraska

Bruce Barton and Brian Molyneaux

University of South Dakota

Jim Becic

Papio-Missouri River Natural Resources District

Jeanne Heuser and Mark Laustrup

U.S. Geological Survey

Gary Ledbetter

U.S. Army Corps of Engineers

Mike LeValley

Missouri River Natural Resources Committee

Gerald Mestl

Nebraska Game and Parks Commission

Mike Olson

U.S. Fish and Wildlife Service

Richard Opper

Missouri River Basin Association

Larry Shepard

U.S. Environmental Protection Agency, Kansas City

Chad Smith

American Rivers

Wayne Werkmeister

National Park Service

FUNDING PROVIDED BY

Environmental Protection Agency, Kansas City

National Park Service

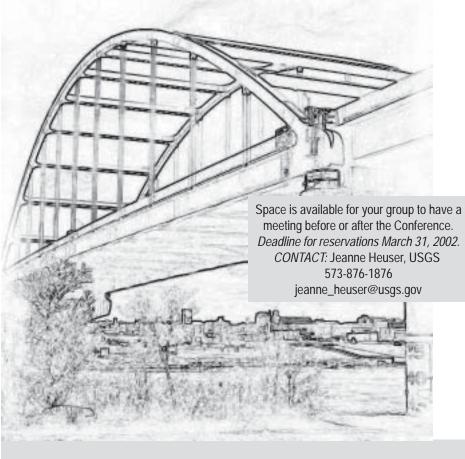
Nebraska Game and Parks Commission

Nebraska Office of

The Nature Conservancy

Registration

Please PRINT and complete one form per person attending.



MAIL OR FAX FORMS TO

The Conference Managers
P. O. Box 7276, Bismarck, ND 58507-7276
phone or fax 1-888-310-8900; confmgrs@aol.com

Return policy: 80% refund by April 16, 2002; no refund after April 17, 2002 (cancellation request must be in writing to "The Conference Managers")



PRE-REGISTRATION DEADLINE APRIL 1, 2002

ONLINE registration available http://infolink.cr.usgs.gov/events/02.htm

Name	
Affiliation	
Address	
	State Zip
Phone ()	Fax ()
E-mail	
FIELD TRIPS	- RESERVATIONS REQUIRED!!
4/21 Niobrara \$25 e.	xtra charge (see page 2)
4/23 #1 Trip or #2	Trip (see page 8-9) No Field Trip ations; remaining people will go on Trip #2.
CONFERENCE FEES Includes 2 socials, 2 lunches, 1	I banquet, and 4/23 field trip
Full - before April 1 after Regular - \$135 Student * - \$115 * Valid Student ID required at registrations in the student of	\$155
Total Cost enclosed \$	Payment due prior to conference.
	CM-MRNRC (Tax ID#39-1894447) and added to all returned checks.
	Visa American Express Expiration date
ignature	
3	

clip here and mail or fax